

## PROJECT DESCRIPTION

## GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF A NEW TRAFFIC SIGNAL AT THE INTERSECTION OF MD4 AT PATUXENT BLVD. AND INTERCONNECT TO MD 235 IN ST. MARY'S COUNTY.

## INTERSECTION OPERATION

THE INTERSECTION IS TO OPERATE IN A NEMA 3 PHASE, FULL-TRAFFIC-ACTUATED MODE. THERE WILL BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR THE NORTHBOUND MOVEMENT OF MD 4. THE MD 4 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE SIDE STREET WILL OPERATE ALONE.

1. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE FOLLOWING STANDARD PLATES FOR TRAFFIC CONTROL: 104.00 - 30, 104.12 - 01, 104.13 - 01, 104.31 - 01, 104.32 - 01, 104.81 - 02

## EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.  
CATEGORY DESCRIPTION  
CODE NO.

NONE

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.  
CATEGORY DESCRIPTION  
CODE NO.

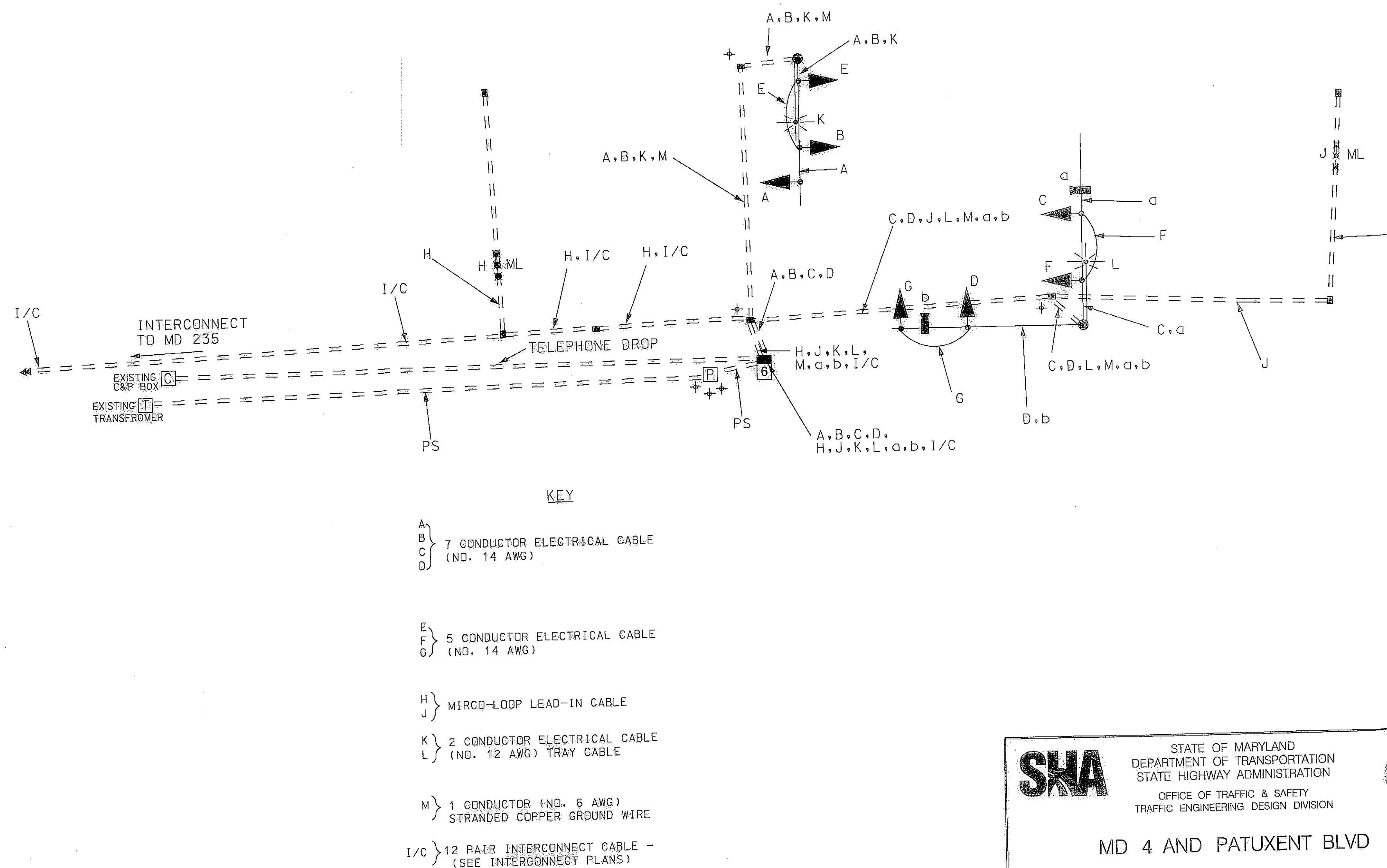
| DESCRIPTION  | UNITS | QUANTITY |
|--|-------|----------|
| MAINTENANCE OF TRAFFIC (AVERAGE)   | LS    | LS       |
| MOBILIZATION (AVERAGE)   | LS    | LS       |
| 27 FT. STEEL MAST ARM POLE WITH 60 FT. MAST ARM                          | EA    | 1        |
| 27 FT. STEEL TWIN MAST ARM POLE WITH TWO 50 FT. MAST ARMS                | EA    | 1        |
| 15 FT. LUMINARIES ARM  | EA    | 2        |
| 250W HPS LAMP AND LUMINARIES   | EA    | 2        |
| STANDARD S.H.A. TRAFFIC SIGNAL CONTROLLER, BASE MOUNTED NEMA 6 CABINET,  | EA    | 1        |
| VIDEO DETECTION INTERFACE, TELEMETRY INTERFACE EQUIPMENT, AND            |       |          |
| FOUR-CHANNEL LOOP DETECTOR AMPLIFIERS                                    | EA    | 2        |
| VIDEO DETECTOR CAMERA AND 300 FT. CABLE                                  | EA    | 2        |
| NON-INVASIVE PROBE (SET OF 3) WITH 500 FT. LEAD-IN CABLE                 | EA    | 5        |
| 12 IN. 3-SECTION LED SIGNAL HEAD - MAST                                  | EA    | 1        |
| 12 IN. 5-SECTION LED SIGNAL HEAD - MAST                                  | EA    | 1        |
| 8 IN. / 12 IN. 5-SECTION LED SIGNAL HEAD - MAST                          | EA    | 1        |
| 16 IN. X VAR. D-3(I) DUAL FACED SIGN - MAST ARM                          | EA    | 1        |
| 30 IN. X 51 IN. SHIELD ASSEMBLY SIGN - POLE MOUNT                        | EA    | 1        |
| 48 IN. X 75 IN. SHIELD ASSEMBLY SIGN - POLE MOUNT                        | EA    | 3        |
| 48 IN. X 48 IN. W3-3 "NEW" SIGN - GROUND                                 | LF    | 105      |
| 4 IN. X 6 IN. WOOD SIGN SUPPORTS   | CY    | 2        |
| TEST PIT EXCAVATION  | EA    | 28       |
| HANDHOLE   | LF    | 350      |
| 2-CONDUCTOR TRAY CABLE (NO. 12 AWG)                                      | LF    | 80       |
| 5-CONDUCTOR CABLE (NO. 14 AWG)   | LF    | 700      |
| 7-CONDUCTOR CABLE (NO. 14 AWG)   | LF    | 4800     |
| 12-PAIR TELEMETRY INTERCONNECT CABLE (NO. 19 AWG) - JELLY FILLED         | LF    | 600      |
| 3-WIRE (NO. 4 AWG) ELECTRICAL CABLE                                      | LF    | 225      |
| BARE COPPER GROUND WIRE (NO. 6 AWG)                                      | LF    | 1060     |
| 2 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED                               | LF    | 3800     |
| 3 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED                               | LF    | 185      |
| 3 IN. PVC CONDUIT [SCHEDULE 80] - PUSHED/BORED                           | LF    | 85       |
| 4 IN. PVC CONDUIT [SCHEDULE 80] - TRENCHED                               | LF    | 135      |
| 4 IN. PVC CONDUIT [SCHEDULE 80] - SLOTTED IN ROADWAY                     | CY    | 11       |
| CONCRETE FOUNDATION FOR TRAFFIC SIGNAL EQUIPMENT                         | EA    | 6        |
| GROUND ROD - 3/4 IN. X 10 FT. LENGTH                                     | EA    | 1        |
| CUT, CLEAN, AND CAP MAST ARM   | LF    | 65       |
| 24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE                  | EA    | 2        |
| REMOVE AND DISPOSE OF EXISTING CONCRETE FOUNDATION 12 INCHES BELOW GRADE | EA    | 1        |
| REMOVAL OF EXISTING PAVEMENT MARKINGS (SYMBOL)                           |       |          |

## PROJECT CONTACTS:

MS KIM TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
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PHONE: (410) 787-7630  
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PHONE: 301-997-1077  
THE POWER COMPANY REPRESENTATIVE IS:  
SMECO  
MR. BOB TROTT  
4415 CRAIN HIGHWAY  
WHITE PLAINS, MARYLAND 20695  
301-855-1011

## PHASE CHART

|              | 1    | 2    | 3    | 4    | 5    | 6    | 7    |
|--------------|------|------|------|------|------|------|------|
| Phase 1 & 6  | G-G  | G-G  | G    | R    | R    | R    | R    |
| 1 Change     | Y-G  | Y-G  | G    | R    | R    | R    | R    |
| Phase 2 & 5  | G    | G    | G    | G    | G    | R    | R    |
| 2 & 5 Change | Y    | Y    | Y    | Y    | Y    | R    | R    |
| Phase 4      | R    | R    | R    | R    | R    | Y    | Y    |
| 4 Change     | R    | R    | R    | R    | R    | Y    | Y    |
| Flashing     | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R |
| Operation    |      |      |      |      |      |      |      |



- KEY
- A } 7 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
  - B }
  - C }
  - D }
  - E } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
  - F }
  - G }
  - H } MICRO-LOOP LEAD-IN CABLE
  - K } 2 CONDUCTOR ELECTRICAL CABLE (NO. 12 AWG) TRAY CABLE
  - L }
  - M } 1 CONDUCTOR (NO. 6 AWG) STRANDED COPPER GROUND WIRE
  - I/C } 12 PAIR INTERCONNECT CABLE - (SEE INTERCONNECT PLANS)
  - PS - POWER SERVICE UNDERGROUND 5 WIRE 1 CONDUCTOR (NO. 4 AWG)
  - GR - GROUND ROD
  - ML - MICRO-LOOP PROBES SET OF (3) THREE
  - a } VIDEO DETECTION CABLE
  - b }

## NOTE

THESE PLANS ARE APPROVED FOR CONSTRUCTION FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF APPROVAL. SHOULD CONSTRUCTION NOT BEGIN WITHIN THIS TIME FRAME, THESE PLANS SHALL BE NULL AND VOID WITHOUT A RE-REVIEW FROM THE TRAFFIC ENGINEERING DESIGN DIVISION.

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|  |                                     |
|--|-------------------------------------|
| STATE OF MARYLAND<br>DEPARTMENT OF TRANSPORTATION<br>STATE HIGHWAY ADMINISTRATION<br>OFFICE OF TRAFFIC & SAFETY<br>TRAFFIC ENGINEERING DESIGN DIVISION |                                     |
| MD 4 AND PATUXENT BLVD   |                                     |
| GENERAL INFORMATION PLAN   |                                     |
| SCALE NONE   | DATE 10/22/08 CONTRACT NO. BW986M82 |
| DESIGNED BY M.A. MEARS   | COUNTY ST. MARY'S                   |
| DRAWN BY M.A. MEARS  | LOGMILE 18000406.83                 |
| CHECKED BY M.A. MEARS  | TIMS NO. 1-912                      |
| F.A.P. NO. NA  | TOD NO.                             |
| TS NO. 4672  | DRAWING - OF SHEET NO. 2 OF 4       |

PLOTTED: Wednesday, October 22, 2008 AT 04:38 PM  
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